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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,115	02/10/2004	Yoshinori Iwaizono	28569.7436	2114
20322	7590	09/21/2005		
SNELL & WILMER ONE ARIZONA CENTER 400 EAST VAN BUREN PHOENIX, AZ 850040001			EXAMINER BARAN, MARY C	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/708,115

Applicant(s)

IWAIZONO, YOSHINORI

Examiner

Mary Kate B. Baran

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The action is responsive to the Amendment filed on 29 June 2005. Claims 1-4 are pending.
2. The amendments filed 29 June 2005 are sufficient to overcome the prior objections to the oath.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darmawaskita (U.S. Patent No. 6,184,659) in view of Park et al. (U.S. Patent No. 5,824,883) (hereinafter Park).

Referring to claim 1, Darmawaskita teaches a secondary battery control circuit (see Darmawaskita, column 3 lines 25-37), comprising: a control section for interrupting charging/discharging of the secondary battery (see Darmawaskita, column 6 lines 14-22), but does not teach a liquid detection section for detecting infiltration or generation of a liquid inside a secondary battery or inside a battery pack in which the secondary battery is installed.

Park teaches a liquid detection section for detecting infiltration or generation of a liquid inside a secondary battery or inside a battery pack in which the secondary battery is installed (see Park, column 2 lines 33-40).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Darmawaskita to include the teachings of Park because incorporating a sensor to detect any liquid leakage within the battery pack would have allowed the skilled artisan to protect the battery or battery pack from any serious damage (see Park, column 1 lines 31-39).

Referring to claim 2, Darmawaskita teaches a temperature detection section for detecting a temperature of the secondary battery (see Darmawaskita, column 5 lines 52-64), wherein the control section controls charging/discharging of the secondary battery based on the temperature detected by the temperature detection section (see Darmawaskita, column 6 lines 14-22).

Darmawaskita teaches that the secondary battery control circuit is formed on a single semiconductor chip (see Darmawaskita, column 4 lines 25-30).

Darmawaskita teaches that the single semiconductor chip is enclosed in a sealing section of the secondary battery (see Darmawaskita, column 12 lines 38-56).

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that Boolish does not teach a liquid detection section for detecting infiltration or generation of a liquid inside a secondary battery on inside a battery pack in which the secondary battery is install. This limitation is met by Park, who teaches a liquid leakage sensor (see Park, column 2 lines 18-22) for detecting leakage within a battery pack (see Park, column 2 lines 33-40). Darmawaskita teaches controlling battery charging or discharging based on battery conditions (see Darmawaskita, column 5 lines 52-64). It would have been obvious to one of ordinary skill in the art to modify Darmawaskita to include the teachings of Park because incorporating a sensor to detect any liquid leakage within the battery pack would have allowed the skilled artisan to protect the battery or battery pack from any serious damage (see Park, column 1 lines 31-39).

***Conclusion***

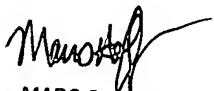
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Kate B. Baran whose telephone number is (571) 272-2211. The examiner can normally be reached on Monday - Friday from 9:00 am to 6:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

15 September 2005

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800